GOVERNMENT OF INDIA
SCIENCE AND TECHNOLOGY
LOK SABHA

UNSTARRED QUESTION NO:2175
ANSWERED ON:17.12.2003
DEVELOPMENT OF AIDS VACCINE
T.T.V. DHINAKARAN

Will the Minister of SCIENCE AND TECHNOLOGY be pleased to state:

(a) whether the National Jai Vigyan Science and Technology Mission has made a breakthrough indeveloping AIDS Vaccine in the country;

(b) if so, the details of the progress made in this regard so far;

(c) whether the Government provides all the required assistance to the Agencies involved in this project; and

(d) if so, the details thereof?

Answer

MINISTER OF STATE FOR SCIENCE AND TECHNOLOGY (SHRI BACHI SINGH RAWAT)

(a) & (b) : Under one of the National Jai Vigyan Science & Technology Missions, Department of Biotechnology (DBT) launched a project towards Development of DNA Vaccine for the HIV-I Subtype `C` at the All India Institute of Medical Sciences (AIIMS), New Delhi. A prototype Candidate Vaccine has been developed based on plasmid DNA and MVA approaches. The prototype HIV-I Vaccine candidate consisting of six components has the potential as preventive vaccine. The results so far have indicated that the vaccine candidate induces a robust and broad based clade- specific and cross-clade immune responses (humoral as well as cell mediated immune responses). Immunized monkeys showed a very strong HIV-1 subtype C specific recall immune response when challenged with MVA construct after 42 weeks of priming alone. The prototype of the vaccine is now ready for preclinical toxicological studies.

(c) & (d) : The Department of Biotechnology has provided the required financial assistance and logistic support to the various institutions involved in this vaccine development project, viz., All India Institute of Medical Sciences, New Delhi, India; Indian Institute of Science, Bangalore; and National Institute of Nutrition, Hyderabad. After successful completion of the preclinical animal toxicological studies, the vaccine candidate is slated for human Phase-I clinical trials during 2005 with the mandatory regulatory approvals. Negotiations with an Indian industry are also in progress for conducting human clinical trials in future.